

The

STW REPORTER

Research-based information
on School-to-Work in New York

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The Westchester Institute for Human Services Research, Inc.

New York State's School-to-Work Initiative Demonstrates Promising Student Results

Recent findings from the statewide school-to-work evaluation

New research on School-to-Work (STW) in New York suggests that students who participate in career development and work-based learning activities—the core elements of STW—reap significant benefits from their involvement. The study conducted by the State's independent evaluator for STW, Westchester Institute for Human Services Research Inc., is among the first to gather reliable information on the academic and career-related experiences of STW students during high school and one year following high school graduation.

Overview of the Study

Information for the study was obtained from a representative sample of 525 high school seniors who were randomly selected from 25 urban, suburban, and rural high schools in the State, including schools in New York City. A smaller sample of 200 young people who had graduated a year earlier (i.e., follow-up sample) was also involved in the study.

Both the high school seniors and follow-up sample completed comprehensive surveys that asked about their academic studies, career aspirations, and work experiences. The surveys also probed the extent of their involvement in STW activities during high school including job shadowing, career exploration, and school-sponsored work opportunities such as internships, community service projects, and paid jobs linked to the curriculum. Responses to these "STW" items enabled the researchers to construct a quasi-experimental design comprised of two study groups within each sample: a *STW Group* who actively participated in STW activities, and a *Comparison Group* who had little or no STW exposure.¹ This design made it possible to draw inferences about the impact of STW activities on critical result areas.

¹ STW students "scored" in the upper quartile on the items, while the comparison group scored in the lower quartile.

Vision for School-to-Work in New York State

All students, Pre-K through adult, both in-school and out-of-school, are provided with a variety of appropriate opportunities to:

- develop high academic performance levels;
- develop workplace readiness skills;
- develop self-awareness, personal talents and abilities;
- understand and apply information about the world of work; and
- develop skills necessary to be successful in postsecondary education, careers, and lifelong learning.

These opportunities will be systemic as they reflect the New York State learning standards and are embedded in state curriculum frameworks, assessments, and other learning experiences. These opportunities are supported by students, parents, business, labor, schools, state leadership and agencies, and the community at large as necessary for a prepared citizenry in a rapidly changing workplace.

New York State School-to-Work Advisory Council

It is important to note that subsequent analyses demonstrated the comparability of STW and comparison groups along relevant demographic factors and high school achievement, as measured by grades. This similarity strengthened the validity of the research design.

Key Findings

While many believe that school-to-work is an important educational endeavor, there is a certain amount of skepticism about its potential to prepare students for careers and college. Some feel that STW programs prepare young people for work directly after high school and foreclose their postsecondary educational options. Others believe that STW activities, especially work experiences, take time

away from academic learning and divert students from challenging educational courses required for college. Still others think that STW involvement limits participation in extracurricular activities, another important consideration in college admissions.

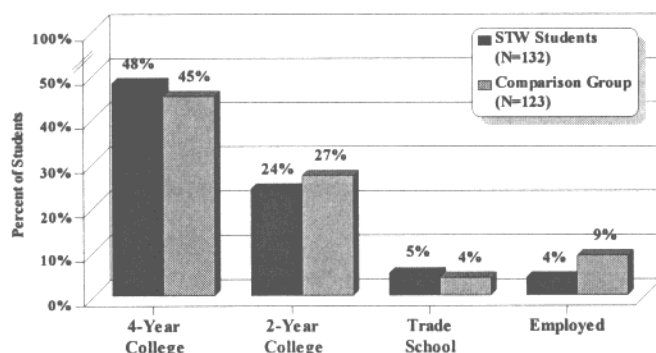
The research team, however, found no evidence to support the validity of these concerns. On the contrary, the data uphold an entirely different set of conclusions:

STW participation does not steer students away from postsecondary educational options.

As illustrated in **Figure 1**, more than 70 percent of 1997 STW seniors planned to enroll in either a four-year or two-year college, with the majority selecting the four-year option. That proportion was equivalent to the college-going plans of the comparison group, and similar to national statistics. Also equivalent was the college preparation assistance received by STW students and their comparison group peers. For example, the majority of both groups were provided with,

- help filling out college applications and financial aid forms,
- information about particular colleges or training programs,
- days off from school to visit colleges.

Figure 1. Postsecondary Plans of STW Seniors and Comparison Group



Source: In-School Student Survey

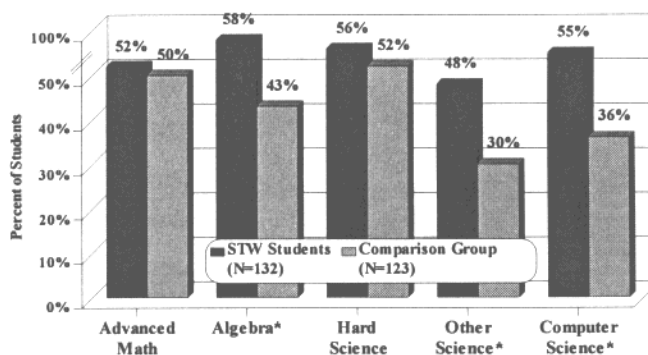
The actual college-going rates of high school graduates—i.e., the follow-up-sample—provide even stronger evidence to back the postsecondary conclusion. Seventy percent (70%) of the STW group was attending college full-time. In addition, of the 30 percent who were employed, most also were enrolled in a 2-year or 4-year col-

lege program. Thus, roughly 85 percent of STW graduates were enrolled in college, either full-time or part-time. Again, these percentages were statistically equivalent to those of the comparison group.²

Academic learning and extracurricular activities do not suffer from STW participation.

In fact, the data revealed that STW may even contribute to more challenging learning and extracurricular involvement. As shown in **Figure 2**, more STW seniors than comparison students had taken advanced science and mathematics courses in high school—courses that yield a high payoff in future earnings. In addition, significantly more members of the STW group had taken a computer science course, another subject that gives young people the edge in college and the job market. Furthermore, achievement in these and other courses was similar for both groups; each maintained about a C+ average.

Figure 2. Participation in Challenging Academic Courses by STW Seniors and Comparison Group



* Statistically Significant ($p < .05$)

Source: In-School Student Survey

A similar pattern of results was evident relative to extracurricular activities. STW students more frequently engaged in organized activities outside of school than comparison seniors. They

- did more volunteer work,
- participated more often in youth groups,
- had more involvement in after-school clubs,
- participated more often in organized sports.

² The follow-up sample did not include students from urban districts. Thus, the findings are only generalizable to suburban and rural populations.

Thus, STW participation did not take away from the basics or from extracurricular activities. Contrariwise, it may have encouraged students to enroll in challenging courses associated with high-status careers, and to pursue organized activities outside of school. At the same time, academic learning did not suffer—STW students were able to achieve on par with their classmates.

The above findings go a long way to refuting some of the common misperceptions about school-to-work. But even more impressive are the results on the **benefits** of STW participation. Key conclusions are as follows:

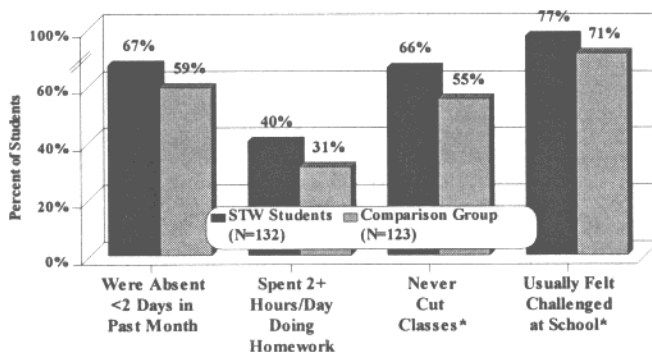
STW students demonstrate greater interest in school and in their studies than comparison students.

Evidence from national surveys suggests that many teenagers are bored with their education, seeing little connection between what they learn in school and the world outside the classroom. This attitude can have a negative impact on a host of variables including attendance, homework, and the motivation to work hard. This study indicated that STW may have had an important effect in this area. STW students, compared with their classmates, showed greater interest in school and learning (see Figure 3). They

- had better school attendance,
- spent more time doing their homework,
- cut fewer classes,
- were more challenged by their schoolwork.

Thus, on the balance, STW students were more engaged in school activities.

Figure 3. Interest in School Among STW Seniors and Comparison Group



* Statistically Significant ($p < .05$)

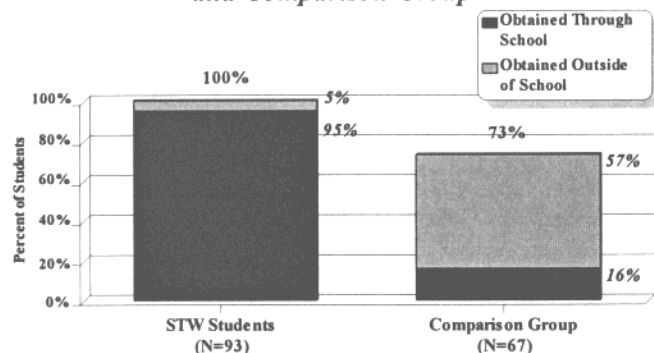
Source: In-School Student Survey

STW students are more frequently exposed to higher quality jobs than comparison students.

Many high school and college students have jobs and various unpaid workplace positions, but most obtain them on their own. These do-it-yourself arrangements, however, typically lack challenge while imposing significant time pressure. They often are low-paid and unskilled, having nothing to do with students' expressed career interests or studies. By contrast, the workplace experiences that students get through school are usually of higher quality. Indeed, this study found that to be the case.

As can be seen from Figure 4, all of the STW seniors (100%) had a paid or unpaid work position at some point in high school, with 95 percent obtaining their position through school. Although 73 percent of the comparison group also had a work experience, only 16 percent got their position through school.³ In other words, nearly all of the STW seniors who worked obtained their jobs through school, while the vast majority of comparison students found their jobs on their own.

Figure 4. Jobs Obtained by STW Seniors and Comparison Group



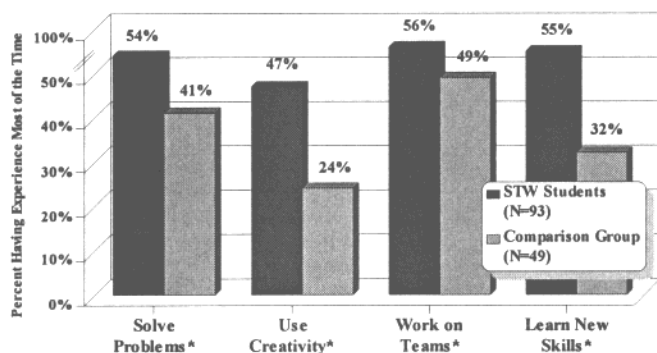
Source: In-School Student Survey

By far, the work experiences of STW seniors were of better caliber than those of the comparison group. As shown in Figure 5, STW students spent a good deal of their work time involved in activities that contribute to a substantive education. For example, they more often

- engaged in problem-solving activities,
- used their imagination and creativity,
- engaged in team work,
- learned and practiced new skills.

³ Note: These percentages are based on the number of students whose schools sponsored paid or unpaid work experience programs (N=93 for STW seniors; N=67 for comparison students).

Figure 5. On-the-Job Experiences of STW Seniors and Comparison Group



* Statistically Significant ($p < .05$)

Source: In-School Student Survey

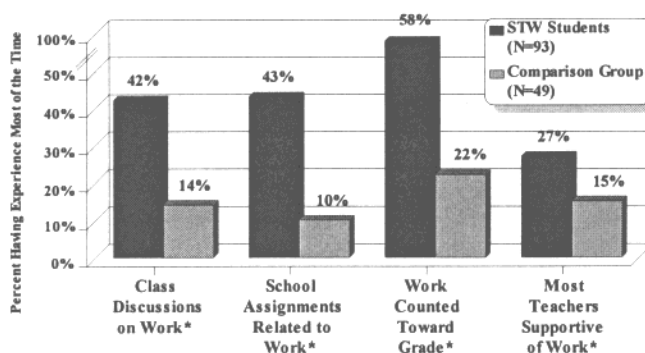
That schools facilitated almost all of these experiences, underscores the importance of school-arranged work opportunities.

Moreover, and very likely because the schools played an active linkage role, the work experiences of STW students were more often connected to in-school instruction. **Figure 6** indicates that STW students, compared with their comparison classmates, more frequently had discussions in class about their jobs, performed school assignments related to their jobs, and had their performance at work count toward a grade in school. They also received more encouragement from teachers to apply their work experiences on school assignments and projects.

Thus, when schools play an active role in arranging work-based positions, students' work experiences are more meaningful and more often connected to their schoolwork. Students are better able to see the link between what they are learning in a classroom (and how well they learn it) and the world of work.

Work Experiences of High School Graduates. A similar set of findings emerged when STW graduates and their comparison peers were asked about their current work experiences. Among the *college-going* graduates who also held jobs, far more of the STW group reported meaningful learning on the job (see **Figure 7**).

Figure 6. The Connection Between School and Work for STW Seniors and Comparison Group



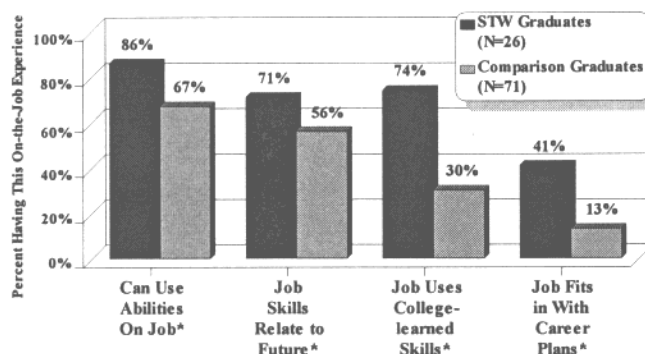
* Statistically Significant ($p < .05$)

Source: In-School Student Survey

A greater number indicated that their jobs

- ♦ enabled them to use their skills and abilities,
- ♦ taught them new skills that would be useful in their future work,
- ♦ made use of special skills they were learning in college,
- ♦ fit in with their long-range career.

Figure 7. Work Experiences of STW Graduates and Comparison Group



* Statistically Significant ($p < .05$)

Source: Follow-up Survey of High School Graduates

Among the high school graduates whose primary activity was work, no differences were found on the above items. There was, however, one exception—significantly more STW graduates than comparison youths indicated that their jobs fit in with their long-range career plans ($p < .05$). In addition, STW graduates expressed higher levels of satisfaction with their jobs ($p < .05$). These findings are critical given research that indicates a job “floundering” pattern among most young people who enter the job market after high school. Participation in STW activities,

therefore, may help young people to find the kind of jobs they want at an earlier stage in their working lives.⁴

STW students have a better sense of their career direction than comparison students.

Research suggests that high school students have a very tentative view of their occupational future. Few have a particular career in mind, and most contemplate at least three or four careers at the same time. This ambivalence frequently carries over to college, where there is a tremendous amount of wheel spinning and wasted effort. One of the central goals of school-to-work is to help students think systematically about their career goals and aspirations. This study suggests that that goal may have been achieved.

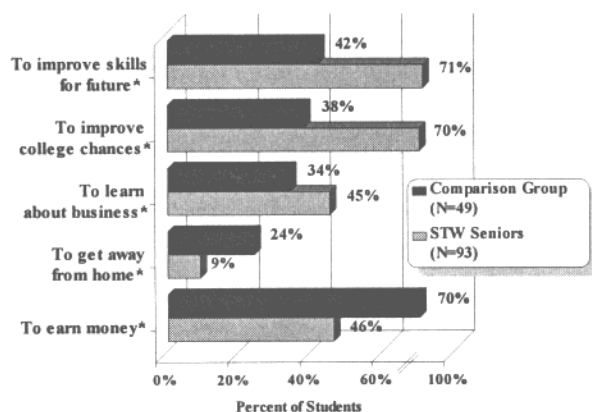
For example, when high school seniors were asked why they decided to participate in a work experience, significantly more members of the STW group cited the following future/career-focused reasons (see **Figure 8**):

- To improve my skills for a future job/career.
- To improve my chances of getting into college.
- To learn about business.

On the other hand, a greater number of comparison group seniors gave more immediate, need-related reasons for work participation, e.g.:

- To get away from home.
- To earn money.

Figure 8. Reasons for Working Given by STW Seniors and Comparison Group



* Statistically Significant ($p < .05$)

Source: In-School Student Survey

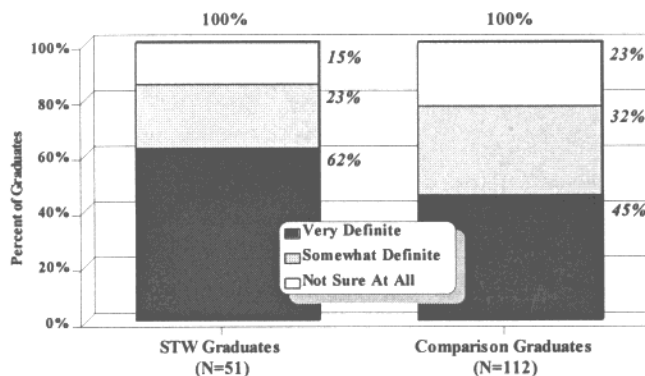
⁴ Care should be taken in generalizing these findings, as the samples involved were small.

STW seniors, more so than comparison students, also felt that their school- and work-based learning experiences had helped them with future career decisions. For example, nearly half said that as a result of their experiences, *I now know what I want to do*. Only one-quarter of comparison students said the same, with the difference being statistically significant ($p < .05$). STW seniors further reported that their school and work experiences had given them greater insight about their skills and abilities, including their areas of strength and where they needed to improve.

The clarity in career direction was evident among STW graduates, as well. For example, significantly more of the college-going STW group had chosen a college major. And far more STW graduates than comparison youths reported being *very definite* about the career they would like to have in the future (see **Figure 9**).

Overall, these data suggest that STW involvement helped young people to think systematically about their future and what is necessary to be able to achieve their occupational or other goals.

Figure 9. Career Decisiveness Among STW and Comparison Group Graduates



Source: Follow-up Survey of High School Graduates

Concluding Remarks

This study provided critical information about the academic and career-related experiences of high school students and graduates who participated in STW activities. Because an experimental design was implemented, the researchers were able to draw certain conclusions about the benefits of STW involvement. They were also able to make judgments about the validity of common criticisms launched against the STW initiative.

On the issue of benefits, the data indicated that STW youth were more engaged in and motivated by their school-work than comparison students. They were exposed to higher quality paid and unpaid work experiences that provided meaningful on-the-job learning. They also had a better sense of their career direction, feeling more certain about what they wanted to do in the future. And they exhibited greater insight about their strengths and areas of weakness.

Regarding the second issue, the researchers found no evidence to support the validity of common criticisms about STW. The data showed that STW does not take away from academic learning. It does not divert students from college. And it does not force students to make irrevocable choices about future occupations.

In conclusion, this study painted a positive picture about school-to-work in New York State. Although additional research is underway to confirm these initial findings, the results, so far, are quite promising. Future surveys of STW youth will explore longer-term outcomes such as earnings, job benefits, college GPA, and college completion rates.

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